# NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD CONNECTICUT/RHODE ISLAND

### RIPARIAN HERBACEOUS COVER

(acre)

### **DEFINITION**

Riparian areas are ecosystems that occur along water courses or at the fringe of water bodies. Riparian herbaceous cover consists of grasses, grasslike plants, and forbs.

### **PURPOSE:**

The buffer purpose may be any one or more of the following:

- Provide habitat (food, shelter, and water) for aquatic and terrestrial wildlife.
- Reduce the amount of sediments, dissolved organic matter, bacteria and nutrients in surface runoff, as well as nutrients and chemicals in shallow ground water flow.
- Provide food, in the form of plant detritus, for aquatic macroinvertebrates.
- Help stabilize the channel bed and streambank.
- Establish corridors to provide landscape linkages between existing habitats.
- Provide a floodplain for water courses to establish geomorphic stability, to increase natural geomorphic processes, mechanics, and equilibrium.
- Improve or maintain desired plant communities in riparian herbaceous habitats.

## CONDITION WHERE PRACTICE APPLIES

- Along water courses or at the boundary of water bodies or wetlands where the natural or desired plant community is dominated by herbaceous vegetation.
- Where the ecosystem has been disturbed and the natural plant community is missing, changed or has been converted to agricultural crops, lawns or other high maintenance vegetation.
- Where invasive species dominate.

#### **GENERAL CRITERIA**

- The minimum width of the buffer will be 100 feet or 30% of the geomorphic floodplain whichever is less, but not less than 35 feet.
- Concentrated flow erosion or mass soil movement shall be controlled in the up gradient area prior to establishment of the riparian herbaceous cover.
- Conservation practices for the protection of resources supporting the riparian ecosystem are components of a Conservation Management System.
- Cultural resources and threatened and endangered species assessments will determine presence and need for protection.
- Plant species selected for use will be ones that are adapted to the site and preferably native to the ecosystem.

See Section II of the FOTG adapted species lists for (Forage Suitability Groups) FSG where available. Invasive plants shall not be planned for establishment. See NRCS CT / RI Guidelines for Development of Riparian Buffers - *Invasive Plant List*.

- Plants selected will, where appropriate, be deep rooted to promote streambank stability and soil health.
- Harmful pests present on the site shall be controlled or eliminated as necessary to achieve and maintain the intended purpose.
- Site preparation shall be sufficient for establishment and growth. Planting shall be done at a time and in a manner that assures survival and growth of selected species. Only viable, high quality, planting stock shall be used.
- Provide an adequate establishment and growth period for the desired plant community before scheduling mowing, grazing or other management.
- Management systems applied will be designed to maintain the vigor and reproduction of the desired plant community. Timing of mowing, vehicle or heavy equipment travel, or haying or grazing will avoid periods when streambanks are saturated and/or subject to livestock or mechanical damage.
- Herbaceous buffer widths vary depending on the planned functions of the riparian area and associated environmental concerns. Aquatic and terrestrial wildlife habitat needs will be used as one factor in the determination of widths.
- Other applicable practices include, but are not limited to:

Restoration and Management of Natural Ecosystems - 766

Restoration and Management of Declining Habitats - 643

Streambank and Shoreline Protection - 580

Stream Channel Stabilization - 584

Fence - 382

Riparian Forest Buffer - 391A

Pasture and Hayland Planting - 512

Range Planting - 550

 The native or natural plant community will be managed and maintained to optimize sediment trapping and water quality functions of the riparian zone.

### CONSIDERATIONS

- Consider the need to provide channel and streambank stability when selecting this practice or other practices that effect stability.
- Target riparian buffer restoration on a watershed basis to address habitat fragmentation, connectivity and corridors for wildlife.
- Establish alternative water sources or controlled access stream crossings to manage livestock access to the stream and riparian area.
- The location, layout and density of the buffer should compliment natural features.
- Corridor configuration, species planted, and management should enhance plant diversity, provide multiple values including aesthetics, and habitats for threatened, endangered, and other species of concern.
- In accordance with NRCS State Policy, evaluate the potential this practice has to destroy or devalue cultural resources listed on the National or State Historic Register(s). This includes cultural resources that may be revealed by an archeological review.
- Consider any local and or state permit requirements.

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### PLANS AND SPECIFICATIONS

Specifications for this practice shall be prepared for each site. Specifications shall be on accordance with the CT/RI Guidelines for the Development of Riparian Buffers, and appropriate practice job sheets. A conservation plan will document planning and application.

### **OPERATION AND MAINTENANCE**

Operation, maintenance, and management is to insure the practice functions as intended over time.

The riparian area will be inspected periodically and protected to maintain the intended purpose from adverse impacts such as excessive vehicular and pedestrian traffic, pest infestations, pesticide use on adjacent lands, livestock damage and fire.

As applicable, control of concentrated flow erosion or mass soil movement shall be maintained in the up-gradient area to preserve riparian function.

Any use of fertilizers, pesticides and other chemicals to assure buffer function shall not compromise the intended purpose.

Any removal of vegetation shall be conducted in a manner that maintains the intended buffer function.

An operation and maintenance (O&M) plan for the practice shall be prepared. Prior to establishment, sufficient copies of the O&M plan shall be provided to the owner/operator, designer, and approving agencies. The owner shall sign the O&M plan to indicate an understanding of the requirements and a commitment to operate and maintain the practice as fully functional.